

## CLAIMS

We claim:

1. A method of determining service criteria for a printhead in a printer comprising:
- receiving an indication that service is needed;
  - determining a calculated age of said printhead; and
  - selecting a service procedure based on the determined calculated age.
2. The method of claim 1, wherein said selected service procedure has an impact on the long term life of said printhead that is proportional to the calculated age.
3. The method of claim 1, further comprising classifying said calculated age as one of a plurality of phases.
4. The method of claim 3, wherein said plurality of phases include at least a beginning of life phase and a maturity phase.
5. The method of claim 3, wherein said plurality of phases include at least a beginning of life phase, a middle of life phase and a maturity phase.
6. The method of claim 5, wherein said selected service procedure for said beginning of life phase has a low impact on the long term life of said printhead.
7. The method of claim 5, wherein said selected service procedure for said middle of life phase has a moderate impact on the long term life of said printhead.
8. The method of claim 5, wherein said selected service procedure for said maturity phase has a severe impact on the long term life of said printhead.

9. The method of claim 1, wherein determining said calculated age comprises utilizing at least one factor selected from the group consisting of: volume of ink expelled, type of previous service procedures, number of previous service procedures, types of previous failures, number of previous failures, time and number of print jobs printed.

10. An apparatus for determining service criteria for a printhead in a printer comprising:

circuitry for receiving an indication that service is needed; and

a processor for determining a calculated age of said printhead and selecting a service procedure based on the determined calculated age.

11. The apparatus of claim 10, wherein said selected service procedure has an impact on the long term life of said printhead that is proportional to said calculated age.

12. The method of claim 10, further comprising circuitry for classifying said calculated age as one of a plurality of phases.

13. The method of claim 12, wherein said plurality of phases include at least a beginning of life phase and a maturity phase.

14. The method of claim 12, wherein said plurality of phases include at least a beginning of life phase, a middle of life phase and a maturity phase.

15. The method of claim 14, wherein said selected service procedure for said beginning of life phase has a low impact on the long term life of said printhead.

16. The method of claim 14, wherein said selected service procedure for said middle of life phase has a moderate impact on the long term life of said printhead.

17. The method of claim 14, wherein said selected service procedure for said maturity phase has a severe impact on the long term life of said printhead.

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18. The method of claim 10, wherein said processor for determining said calculated age comprises utilizing at least one factor selected from the group consisting of: volume of ink expelled, type of previous service procedures, number of previous service procedures, types of previous failures, number of previous failures, time and number of print jobs printed.

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